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EXAMINER
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ART UNIT	PAPER NUMBER
2612	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/522,434	RICHTER ET AL.	
	Examiner	Art Unit	
	MICHAEL SHANNON	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,15-27 and 29-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,15-27 and 29-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 2010* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/7/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

Status of the Claims

1. This is in response to the applicants' amendment filed on January 7, 2010. Claims 1-9, 15-27, and 29-32 are currently pending. Claims 10-14 and 28 were canceled; and claims 1-3, 6, 8, 15-17, 19, 22, 24, 29, and 31-32 were amended by applicants.

Drawings

2. The drawings are objected to because:

a. In Figure 1, “skin contact” 4 should be more properly labeled as "coupling unit" 4 or "coupling device" 4, and "body electrode" 6 should be more properly labeled as "contact region" 6 (as identified on pages 17 and 18 of the revised clean version of the description). This objection is maintained from the previous Office Action, and was not specifically addressed in the applicants’ amendment.

b. In Figure 5, reference number 50 should be labeled as "switch", and reference number 54 should be labeled as “loss timer” (as identified on page 28 of the revised clean version of the description). This objection is maintained from the previous Office Action, and was not specifically addressed in the applicants’ amendment.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 16, 18 and 31 are objected to because of the following informalities:

a. Claim 16, line 1: typographical error: the second “a” should be deleted.

b. In claim 18, line 2, it is unclear which surface that "the surface” is referring to, since an outer surface and an inner surface are defined in claim 17, from which this claim depends. For the purpose of examination, the examiner assumes that the applicant is referring to the outer surface of the hand grip. This objection is maintained from the previous Office Action, and was not specifically addressed in applicants’ amendment.

c. In claim 31, line 2, it appears that there is a typographical error and that the word "so" should appear after "modulated", rather than before "modulated". This objection is maintained from the previous Office Action, and was not specifically addressed in applicants' amendment.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 recites the limitation "The hand grip" in line 1. There is insufficient antecedent basis for this limitation in the claim. It appears that there may have been a typographical error and that this claim was meant to depend from claim 17, where "a hand grip" is introduced. For prior art examination purposes, this claim will be treated as depending from claim 17.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 7-9, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman (U.S. Patent 6,861,944 B1), and in view of de la Huerga (U.S. Patent 5,960,085) and Alt et al. (U.S. Patent 6,580,356 B1).

a. Regarding Claim 1, Hoepelman discloses the following:

"A system for preventing accidents in the operation of a monitored machine or apparatus carried by a user" (Column 1, lines 7-12 and lines 41-46, where securing authorization is considered to be a method of preventing accidents, and a firearm is considered to be an apparatus carried by a user);

"at least one user end device or terminal" "with output means for" "transmitting an authorizing user data signal through the body of the user" (Column 2, lines 3-7 and Column 2, line 66- Column 3, line 11 where the *transmitter-side chip* corresponds to the "user end device or terminal", the *transmitter* of line 8 corresponds to the "output means", and the *personal code data* corresponds to authorization data). Furthermore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to "continuously or periodically" transmit the authorizing data signal, in order to ensure determination that the expected signal is received by the intended receiver in the consideration process.

"at least one signal receiver assigned to the monitored apparatus or machine" (Column 3, lines 45-52 and Figure 2 where the "signal receiver" comprises all of reference numbers **22, 24-26, 28, 30, and 32**);

"interface means" "for receiving the authorizing data signal transmitted through the body of the user" (Column 3, lines 45-56 where the *receiving electrode* ***22*** functions as the "interface means");

"means for testing the received data signal" (Column 2, lines 9-12 and Column 3, lines 57-61 where the *controller* ***24*** provides the "means for testing" and a comparison is considered a form of testing);

"means for outputting a clearance signal that allows operation of the monitored machine or apparatus after a successful test of the received authorizing user data signal" (Column 3, lines 61-67 where the *output signal* ***28*** is the "clearance signal").

Hoepelman does not specifically disclose that the user end device or terminal is "in direct contact with the body of the user". However, Alt et al. discloses a system that uses the human body to transmit encoded electrical signals (Col. 2, line 66 – Col. 3, line 5), in which a transmitter is in *physical and electrical contact with the body of the wearer* (Col. 3, lines 24-35; Col. 7, lines 5-14). Hoepelman does not specifically disclose that the interface means of the signal receiver is "in contact with the body of the user". However, Alt also discloses such an arrangement at the receiving end as well (Col. 7, lines 20-29, *electrical contact pad* ***32***). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Alt et al. in the teachings of Hoepelman in order to ensure correct coupling of the transmitted and received signal to and from the body of the user.

Hoepelman does not specifically disclose "means for terminating output" of the clearance signal following a successful test of the authorizing user data signal, "when a

subsequent test of the data signal fails." However, de la Huerga (Column 4, line 40 - Column 5, line 11) discloses an authentication system where verification of a system user is intermittently performed. If authenticated using a verification system, the user is logged-on to the system; and subsequently, if the authentication signal is not received, the user is logged-off (where log-in status is considered to be a form of clearance to use a system or device). Thus, in effect, inability to receive authentication data would be tantamount to an unsuccessful verification test of that data, while the testing of the received signal is "continuously or periodically" performed in de la Huerga (Col. 4, line 66 – Col. 5, line 6). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of de la Huerga in the teachings of Hoepelman and Alt in order to maximize the security of the device (de la Huerga, Column 6, lines 31-37), rather than authorizing the device for an indefinite period of time following a successful authorization.

b. Regarding Claim 2, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above. Hoepelman further discloses: wherein the output means "functions inductively or capacitively through the body of the user." (Column 2, lines 12-20 and Column 4, lines 14-15).

c. Regarding Claim 3, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above, including "the output means of the user end device or terminal." Hoepelman does not specifically teach that the output means has "a contact region for direct coupling of the authorizing user data signal to the body of the user or a signal output for transmitting the authorizing data signal to a device

directly connected with the body of the user." However, Alt et al. discloses a *personal identification generator* that has a *signal transmitter unit* ***10*** which couples the signal to a user through an *electrically conductive surface* (Column 3, lines 16-23 and Column 7, lines 5-11, where the *signal transmitter unit* corresponds to the "output means" and the *electrically conductive surface* functions as the "contact region"). This meets the first alternative in the limitations of this claim. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Alt et al. in the teachings of Hoepelman and de la Huerga in order to provide a personal identification system, or an authorization system which is more efficient, inexpensive, less intrusive and physically interactive, and obviates the need for more complex hardware and/or software (Alt et al., Column 2, lines 47-56).

d. Regarding Claim 4: "The system according to claim 1 in which the user end device or terminal is equipped and programmed to transmit signals comprising a code giving authorization to the user and control commands for controlling the signal receiver." Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above. While Hoepelman does not specifically disclose transmission of control commands, in addition to the authorization codes, for controlling the signal receiver, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention, that additional commands could be transmitted. For instance, the transmission signal could include an authorization code as well as a command to allow operation of the monitored device. However, Hoepelman performs both of these

functions as part of the authorization process, which is a more efficient way of operating the system.

e. Regarding Claim 5, Hoepelman, Alt and de la Huerga render obvious the subject matter of claim 1, as described above, including "the interface means of the signal receiver." Hoepelman does not specifically teach that the interface means "comprises contact-sensitive means for receiving the signals from the user end device or terminal upon contact of the contact-sensitive means with the user." However, Alt et al. teaches such an arrangement (Column 4, lines 33-41, where the *electrical contact surface* functions as the "contact-sensitive means", the *signal transmission unit* corresponds to the "user end device", and the *identity recognition system* comprises the "signal receiver"). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Alt et al. in the teachings of Hoepelman and de la Huerga in order to provide a personal identification system, or an authorization system which is more efficient, inexpensive, less intrusive and physically interactive, and obviates the need for more complex hardware and/or software (Alt et al., Column 2, lines 47-56).

f. Regarding Claim 7, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above, including ""the means of the signal receiver for testing the authorizing data signal". Hoepelman further teaches storage associated with the signal receiver (Column 2, lines 26-29 and Column 4, lines 47-53, where the *storage area* ***25*** functions as a "correspondence register") which can store at least two data element (Column 5, lines 49-55 and Figure 1). While Hoepelman

discloses storing personal code data and shooting time, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention, that both locations could be dedication to personal code, or authorization data; thus, meeting the limitation of "a correspondence register with at least two storage or memory locations or data for testing the authorizing data signal."

g. Regarding Claim 8: "The system according to claim 1 wherein the signal receiver is equipped and programmed depending upon the signal received from the user end device or terminal to access data for testing the authorization data signal." Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above. Hoepelman discloses the limitations of this claim since, as described in the rejection of claims 1 and 7, the signal receiver is capable of testing the data to serve as authorization data, based on stored data (where accessing the stored data is inherent to performing a comparison); and, the signal receiver would not be equipped to test the data until it receives the corresponding incoming data from the user terminal.

h. Regarding Claim 9, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above. Hoepelman further discloses "wherein the user end device is arranged in or on protective clothing." (Column 4, lines 11-15, where safety goggles are considered a form of protective clothing and meet the criteria of this cited passage, and *PAN devices* are as defined in Column 3, lines 21-30).

i. Regarding Claim 15, Hoepelman, Alt and de la Huerga render obvious the subject matter of claim 1, as described above. Hoepelman further discloses: "Protective clothing with the system of claim 1." (Column 4, lines 11-15, where safety goggles are

considered a form of protective clothing and meet the criteria of this cited passage, and *PAN devices* are as defined in Column 3, lines 21-30). The term "with" in this claim is interpreted to mean, in light of the disclosure, that some of the components of the system may be on the protective clothing, and other components may be separate from the clothing, but cooperating with the components on the clothing.

j. Regarding Claim 16, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above. Hoepelman further discloses: "a household appliance, electric and mechanical tool, or machine tool with the system of claim 1." (Column 1, lines 6-12 where an electric or mechanical tool and certain household appliances could meet the criteria of *dangerous devices*). The term "with" in this claim is interpreted consistently with the interpretation of claim 15.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt et al., and de la Huerga as applied to claim 1 above, and further in view of Gersheneld et al. (U.S. Patent 5,914,701).

Regarding Claim 6, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above, including "interface means of the signal receiver" and "the signals of the user end device or terminal". Hoepelman does not specifically disclose that the interface means "has inductive or capacitive means for receiving" the signals of the user end device or terminal "by means of inductive or capacitive signal transmission." However, Gersheneld et al. also teaches a system for signaling that uses induced body current, which includes a *receiver* for detecting the signals by capacitive coupling by means of an *inner electrode* ***24*** (Column 2, lines 1-4 and Column

4, lines 55-58, where the *inner electrode* ***24*** functions as a "capacitive means"). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Gersheneld et al. in the teachings of Hoepelman, Alt, and de la Huerga in order to avoid interference such as might be encountered using other wireless systems (Gersheneld et al., Column 1, lines 33-40).

9. Claims 17-18, 24-25, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt et al. and de la Huerga as applied to claim 1 above, and further in view of Recce (U.S. Patent 6,563,940 B2).

a. Regarding Claim 17, Hoepelman, Alt, and de la Huerga render obvious the subject matter of claim 1, as described above, including an authorization control system for a device such as a firearm. Hoepelman does not specifically disclose the details of a hand grip of the device. However, Recce also discloses an unauthorized user prevention device and method, which can include a firearm including:

"a hand grip" (Column 3, lines 3-4);

"having a body including a hand grip outer surface engageable by an inner surface of a hand of the user and having a segment forming a hand rest for the hand inner surface" (Column 4, lines 29-31 and Figure 1);

"in the region of the hand inner surface at least one pressure-sensitive zone for generating a signal indicating the hand grip gripping state and constituting the authorizing data signal." (Column 3, lines 58-59, Column 6, lines 52-59 and Figure 1 where *sensor array* ***125*** comprises "at least one pressure-sensitive zone"; Column 3, lines 21-22 and lines 32-35 where the *pressure signature profile* corresponds to the

"gripping state"; and, Column 3, lines 43-49 which teach that the signal constitutes an "authorizing data signal").

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Recce in the teachings of Hoepelman, Alt, and de la Huerga in order to provide a second/redundant check for authorization of the user of a device which would provide increased security in the case that the user end terminal taught by Hoepelman is accidentally misplaced, or stolen.

b. Regarding Claim 18, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above. Hoepelman does not specifically teach "wherein the surface has a plurality of the pressure-sensitive zones." However, Recce teaches that the hand grip has a plurality of pressure sensitive zones (Column 3, lines 58-59, Column 6, lines 52-59 and Figure 1). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Recce in the teachings of Hoepelman, Alt, and de la Huerga in order to provide a more accurate pressure signature profile than could be provided with just one pressure sensor.

c. Regarding Claim 24, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above. Hoepelman does not specifically teach "wherein the hand grip in the region of the hand inner surface rest has pressure-sensitive zones in the hand rest region and in a finger inner surface rest region." However, Recce teaches that the *array of sensors* ***125*** are provided on all four sides of the handgrip which would include an outline of finger pressure (Column 8, lines

23-27 and Column 7, lines 26-32 where having pressure sensors on all four sides of the hand grip would ensure sensors where the hand rests and where the fingers rest). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Recce in the teachings of Hoepelman, Alt, and de la Huerga in order to provide a more accurate pressure signature profile than could be provided with just one pressure sensor.

d. Regarding Claim 25, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above. Hoepelman does not specifically teach "wherein in the region of the hand grip a plurality of individual finger inner surface pressure-sensitive zones are provided." However, Recce teaches the ability to measure the hand position of the user's hand on the device and pressure as a function of position on the handle, including an outline of the fingers (Column 7, lines 17-32). This implies the ability to measure the pressure applied by individual fingers. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Recce in the teachings of Hoepelman, Alt, and de la Huerga in order to provide a more accurate pressure signature profile than could be provided with just one pressure sensor.

e. Regarding Claim 30, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above. Hoepelman further discloses "a signal-modulating device for the modulation of the authorizing data signal" (Column 3, lines 8-25 where the *resonant tank circuit* functions as a "signal-modulating device"). While Hoepelman does not specifically disclose the signal coming from a

hand grip, there is a suggestion that the system of Hoepelman could be incorporated in a firearm (Column 1, lines 7-12).

f. Regarding Claim 31, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 30, as described above. Hoepelman further discloses "wherein the signal is so modulated that it contains a data telegram." Hoepelman discloses the signal modulation as described in the rejection of claim 30 above, and that the signal comprises authorizing data as described in the rejection of claim 1 above. The authorizing data signal is considered to be a "telegram".

10. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt, de la Huerga, and Recce as applied to claim 17 above, and further in view of Koch (U.S. Patent 3,897,058).

a. Regarding Claim 19, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above, including the hand grip. Hoepelman does not specifically teach "wherein the pressure-sensitive zone forms part of a fluid pressure chamber." However, Koch teaches a *pressure-responsive grip* ***54*** which forms part of a *fluid receiving reservoir* ***56*** (Column 6, lines 5-9). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Koch in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide an alternative way of measuring grip pressure which is potentially less expensive than the piezoelectric crystals taught by Recce.

b. Regarding Claim 20, Hoepelman, Alt, de la Huerga, Recce, and Koch render obvious the subject matter of claim 19, as described above, including "the

pressure-sensitive zone". Hoepelman does not specifically teach that the pressure-sensitive zone is "formed by an elastically deformable pressure chamber wall." However, Koch teaches that the *pressure-responsive grip* ***54*** is made of a plastic with *sufficient flexibility to compress easily under external hand pressures* (Column 6, lines 62-66). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Koch in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide an alternative way of measuring grip pressure which is potentially less expensive than the piezoelectric crystals taught by Recce.

c. Regarding Claim 21, Hoepelman, Alt, de la Huerga, Recce, and Koch render obvious the subject matter of claim 19, as described above, including "the pressure chamber". Hoepelman does not specifically teach wherein the pressure chamber is "filled with a liquid, gel or gas." However, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to fill the fluid reservoir taught by Koch, as described in the rejection of claim 19 above, with any suitable liquid, gel or gas which would best meet the demands of the system. It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Koch in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide an alternative way of measuring grip pressure which is potentially less expensive than the piezoelectric crystals taught by Recce.

d. Regarding Claim 22, Hoepelman, Alt, de la Huerga, Recce, and Koch render obvious the subject matter of claim 19, as described above, including "the

pressure chamber". Hoepelman does not specifically teach wherein the pressure chamber is "coupled with a switch." However, Recce teaches a pressure sensitive grip that is coupled to a solenoid for allowing use of the device, and that other types of switches could be used (Column 10, lines 49-57 and Column 11, lines 7-10). The type of grip used to create the pressure profile is not considered essential to the activity of the switch, as long as the pressure profile is authorized. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Recce in the teachings of Hoepelman, Alt, de la Huerga, and Koch in order to provide an added measure of safety for the device, because the device could remain in locked state when not in use, and only switched to an unlocked state when use is authorized.

e. Regarding Claim 23, Hoepelman, Alt, de la Huerga, Recce, and Koch render obvious the subject matter of claim 19, as described above, including "the pressure chamber". Hoepelman does not specifically teach wherein the pressure chamber is "coupled with a pressure-measurement device." However, Koch teaches coupling of a pressure-responsive grip comprising a fluid reservoir that is coupled to a *pressure indicator and/or recording means* (Column 2, lines 23-31). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Koch in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide an added measure of security, because a means for recording grip pressure could provide information for use by law enforcement authorities, subsequent to an attempted unauthorized use of a device, such as a firearm.

11. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt, de la Huerga, and Recce as applied to claim 17 above, and further in view of Meixner et al. (U.S. Patent 5,583,386).

a. Regarding Claim 26, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above, including the "hand grip". Hoepelman does not specifically teach "an orientation-detecting device" in region of the hand grip. However, Meixner et al. teaches a safety mechanism for electrically operated devices that includes *a position or tilt switch* ***7*** included in the hand grip of a device (Column 2, lines 43-48, Column 5, lines 5-9 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Meixner in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide increased safety so that the device is only turned on if operated properly; i.e., in the correct position (Meixner et al., Column 3, lines 9-14).

b. Regarding Claim 27, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above, including the "hand grip". Hoepelman does not specifically teach that the hand grip is "a hand grip of a drill." However, Meixner et al. teaches a safety mechanism for electrically operated devices that includes a hand drill with a *hand or pistol grip* ***2*** (Column 4, lines 6-8). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Meixner in the teachings of Hoepelman, Alt, de la Huerga, and Recce in order to provide increased safety so that a hand drill is only turned on if operated properly; i.e., in the correct position (Meixner et al., Column 3, lines 9-14).

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt, de la Huerga, and Recce as applied to claim 17 above, and further in view of Gersheneld et al..

Regarding Claim 29, Hoepelman, Alt, de la Huerga, and Recce, render obvious the subject matter of claim 17, as described above, including the "hand grip" and "output means". Hoepelman does not specifically teach that the output means "is so configured that it effects a signal coupling on the basis of electrostatic interaction." However, Gersheneld teaches a system for signaling, using body currents, where the signal is transmitted by means of an electrostatic field (Column 2, lines 9-16). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Gersheneld et al. in the teachings of Hoepelman, Alt, de la Huerga, and Recce, in order to avoid interference such as might be encountered using other wireless systems (Gersheneld et al., Column 1, lines 33-40).

13. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoepelman, Alt, de la Huerga, and Recce as applied to claim 17 above, and further in view of Fischer (U.S. Patent 4,900,881).

Regarding Claim 32, Hoepelman, Alt, de la Huerga, and Recce render obvious the subject matter of claim 17, as described above, including a "hand grip", "detecting the gripping state", "producing a signal indicating the gripping state", and a "clearance signal". The above reference combination does not specifically disclose two hand grips or "generating the clearance signal only when both of the hand grips are gripped". However, Fischer discloses a safety interlock for a floor maintenance machine

(considered a “power tool”), where the machine can only be started from rest when both hand levers and grips are squeezed simultaneously (Col. 4, lines 46-66 and Col. 5, lines 32-41). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to combine the teachings of Fischer in the teachings of Hoepelman, Alt, de la Huerga, and Recce, for improved safety, so that a machine that requires two hands to operate cannot be carelessly operated with one hand.

Response to Arguments

14. Applicant's arguments with respect to claims 1-9, 15-27, and 29-32 as amended have been considered but are moot in view of the new grounds of rejection, which fully addressed all of the claimed limitations of the amended claims. See above rejection for full detail.

Conclusion

15. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL SHANNON whose telephone number is (571)270-7457. The examiner can normally be reached on Monday through Friday, 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin C. Lee can be reached on 571-272-2963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. S./
Examiner, Art Unit 2612

/BENJAMIN C. LEE/
Supervisory Patent Examiner, Art Unit 2612